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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/797,617

03/09/2004

Geoffrey B. Rhoads

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EXAMINER

ALLISON, ANDRAE S

ART UNIT

PAPER NUMBER

2624

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DELIVERY MODE

10/26/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/797,617	<b>Applicant(s)</b> RHOADS ET AL.	
	<b>Examiner</b> ANDRAE S. ALLISON	<b>Art Unit</b> 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed 03/01/2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6,8,10,11 and 15-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 10-11 and 15-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Remarks***

1. The Office Action has been made issued in response to Appeal Brief filed March 01, 2010. Claims 1-6, 8, 10-11 and 15 -23 are pending.

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### **Claim Rejections – Double Patenting**

Applicant argues that performing logarithmic sampling of the media signal" does not require a transform of the median signal into a frequency domain", the Examiner agrees. Therefore the rejection is being withdrawn.

### ***Priority***

2. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. § 119(e) or under 35 U.S.C. § 120, 121, or 365(c) is acknowledged. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. § 120 as follows: The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. § 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

The disclosure of the prior-filed application, Application Nos. 08/746,613, 08/649,419, 08/637,531, 09/186,962 and PCT/US96/06618 each fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. § 112 for one or more claims of this application. None of these prior applications discloses detecting an embedded signal in the frequency components; based on the detecting, determining geometric transformation parameters defining a geometric transformation of the media signal; and using the geometric transformation parameters to transform the media signal as defined by the claimed invention. Because these prior applications do not describe the above mentioned limitations, they fail to show that applicant was in possession of the currently claimed invention at the time the various prior applications were filed, so that the instant claims are not entitled to the benefit of any filing date prior to the filing date of Application No. 09/452023, which fully supports the currently claimed invention. Therefore, the effective filing date for the currently claimed invention is considered to be 30 November 1999.

### ***Interference***

3. Claims 1-6, 8, 10-11 are rejected under 35 U.S.C. 135(b)(1) as not being made prior to one year from the date on which US 2001/0055390 was published (note that the claims in U.S. Patent No. 6,741,758 are essentially the same). See *In re McGrew*, 120 F.3d 1236, 1238, 43 USPQ2d 1632, 1635 (Fed. Cir. 1997) where the Court held that 35 U.S.C. 135(b) may be used as a basis for *ex parte* rejections.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 15-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pereira et al (NPL Document title: Template Based Recovery of Fourier -Based Watermarks Using Log-polar and Log-log Maps) in view of Daly et al (US Patent No.: 6,173,287).

As to independent claim 15, Pereira discloses a signal processing method for determining a geometric transformation applied to a media signal (method for recovering template in an image that has rotation and scaling - see abstract ), the method comprising: transforming the media signal into a frequency domain to produce frequency components of the media signal (see page 3, section 4.4, part 2 - where the image is transformed using an FFT); detecting an embedded signal in the frequency components; based on the detecting (see page 4, section 4.4, part 3), determining geometric transformation parameters defining a geometric transformation of the media signal (see page 4, section 4.4, parts 4-5); and using the geometric transformation parameters to transform the media signal (see page 4, section 4.4, part 6). However, Pereira does not expressly disclose using a programmed computer. Daly discloses a programmed computer (see column 5, line 30).

Pereira and Daly are combinable because they are both directed to digital watermarking.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the teaching of Pereira to include the digital watermarking method as taught by Daly

The motivation for doing so would have been to recover the watermark from the image by cross correlating the source image containing embedded data with a decoding carrier image to recover the data image and extracting the watermark from the image (see column 4, lines 25-26).

Therefore, it would have been obvious to combine Pereira with Daly to obtain the invention as specified in claim 1.

As to claim 16, Pereira teaches the method wherein the frequency components are computed using a Fourier transform (see page 2, section 1, [p][007]).

As to claim 17, the combination of Pereira and Daly as a whole does not teach the method including pre-filtering the media signal to attenuate noise relative to the embedded signal. However, it would have been obvious for one skilled in the art using known methods of pre-filtering the media signal to attenuate noise relative to the embedded signal with predictable results, to increase distinction between host image and watermark information so that the watermark can easily detected.

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As to claim 18, Pereira teaches the method wherein including performing a log sampling of the media signal (see page 3, section 4.1).

As to claim 19, Pereira teaches the method including performing a log-log sampling of the media signal (see page 3, section 4.2).

As to claim 20, Pereira teaches the method including performing a log-polar sampling of the media signal (see page 3, section 4.1).

As to claim 21, note the discussion above, Daly teaches the method wherein the media signal comprises an electronic signal representing image signals stored in a memory (see column 5, lines 25)

As to claim 22, note the discussion above, Daly teaches the method wherein the image signals comprise video (see column 5, line 20).

As to claim 23, note the discussion above, Daly teaches a computer readable medium (see column 5, lines 25) is stored instructions, which when executed by a computer, perform the method of claim 15.

***Inquiries***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDRAE S. ALLISON whose telephone number is (571)270-1052. The examiner can normally be reached on Monday-Friday, 8:00 am - 5:00 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on (571) 272-7223. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrae S Allison/  
Examiner, Art Unit 2624

/Vu Le/  
Supervisory Patent Examiner, Art Unit 2624